

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.

L Number	Hits	Search Text	DB	Time stamp
1	990	("delay chain") and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 07:32
2	227	("delay chain" with inverter) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 07:32
3	38	("delay chain" with inverter with series) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 08:02
4	56	"5621739"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 07:35
5	8	("delay chain" with inverter with even) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 08:11
6	3	("delay chain" with inverter with (tristate tri-state "tri state")) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 08:32
7	1		USPAT	2004/06/23 08:15
8	1		USPAT	2004/06/23 08:20
9	1		USPAT	2004/06/23 08:20
10	1		USPAT	2004/06/23 08:25
11	39	("delay chain" with inverter with clock) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 08:35
12	2	("delay chain" with inverter with known) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 08:38
13	7	("delay chain" with inverter with simple) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 11:17
34	454	(710/240.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 11:18
35	204	(710/241.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 11:23
37	1013	(710/305.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 11:25

38	436	(710/113.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 11:29
39	858	(710/107.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 12:42
40	1252	(710/52.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 12:47
41	354	(326/56.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 12:48
42	344	(327/392.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 12:52
43	334	(713/401.ccls.) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 14:24

44	102	("6141713" "5987549" "4423384" "4897833" "5261109" "5274822" "5649206" "5948078" "6026464" "6301642" "5887267" "4814974" "4969120" "5307466" "4494192" "4924380" "5371893" "5426737" "5699540" "5842025" "5857114" "5884051" "6105094" "4789926" "5513096" "5812880" "6131114" "5918025" "4541043" "4586128" "5682467" "4096572" "4363094" "4536839" "4611297" "4760521" "4768145" "5317696" "5432911" "5506970" "5996037" "6070205" "6240475" "6317813" "6697904" "4928234" "5392434" "5768543" "5598554" "5815681").pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 14:24
-	5014	((tristate tri-state "tri state") adj buffer) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/22 11:08
-	2068	((tristate tri-state "tri state") adj buffer) same bus) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/22 11:09
-	102	((tristate tri-state "tri state") adj buffer) same bus same delay) and @ad<20020130	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/06/23 07:32

54

PLUS Search Results for S/N 10060454, Searched June 23, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

6141713  
5987549  
4423384  
4897833  
5261109  
5274822  
5649206  
5948078  
6026464  
6301642  
5887267  
4814974  
4969120  
5307466  
4494192  
4924380  
5371893  
5426737  
5699540  
5842025  
5857114  
5884051  
6105094  
4789926  
5513096  
5812880  
6131114  
5918025  
4541043  
4586128  
5682467  
4096572  
4363094  
4536839  
4611297

10060454\_LIST

4760521  
4768145  
5317696  
5432911  
5506970  
5996037  
6070205  
6240475  
6317813  
6697904  
4928234  
5392434  
5768543  
5598554  
5815681

10060454\_CLS  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 10060454 on June 23, 2004

Original Classifications

7	710/107
7	710/113
3	710/244
3	711/151
2	710/111
2	710/117
2	710/241

Cross-Reference Classifications

7	710/113
5	710/241
5	711/150
4	710/240
3	710/107
3	710/110
3	711/151
2	340/825.5
2	340/825.51
2	370/462
2	710/108
2	710/119
2	710/242
2	711/168

Combined Classifications

14	710/113
10	710/107
7	710/241
6	711/151
5	710/240
5	711/150
4	710/244
3	710/110
3	710/111
3	710/242
2	340/825.5
2	340/825.51
2	370/462
2	710/108
2	710/112
2	710/116
2	710/117
2	710/119

10060454\_CLS

2 710/22  
2 710/309  
2 711/158  
2 711/168



10060454 CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 10060454 on June 23, 2004

14	710/113	(7 OR, 7 XR)
	Class 710 :	ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT
	710/100	INTRASYSTEM CONNECTION (E.G., BUS AND BUS TRANSACTION PROCESSING)
	710/107	.Bus access regulation
	710/113	..Centralized bus arbitration
10	710/107	(7 OR, 3 XR)
	Class 710 :	ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT
	710/100	INTRASYSTEM CONNECTION (E.G., BUS AND BUS TRANSACTION PROCESSING)
	710/107	.Bus access regulation
7	710/241	(2 OR, 5 XR)
	Class 710 :	ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT
	710/240	ACCESS ARBITRATING
	710/241	.Centralized arbitrating
6	711/151	(3 OR, 3 XR)
	Class 711 :	ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MEMORY
	711/100	STORAGE ACCESSING AND CONTROL
	711/147	.Shared memory area
	711/151	..Prioritized access regulation
5	710/240	(1 OR, 4 XR)
	Class 710 :	ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT
	710/240	ACCESS ARBITRATING
5	711/150	(0 OR, 5 XR)
	Class 711 :	ELECTRICAL COMPUTERS AND DIGITAL PROCESSING SYSTEMS: MEMORY
	711/100	STORAGE ACCESSING AND CONTROL
	711/147	.Shared memory area
	711/150	..Simultaneous access regulation
4	710/244	(3 OR, 1 XR)
	Class 710 :	ELECTRICAL COMPUTERS AND DIGITAL DATA PROCESSING SYSTEMS: INPUT/OUTPUT

10060454\_CLSTITLES

710/240 ACCESS ARBITRATING

710/244 .Access prioritizing

3 710/110 (0 OR, 3 XR)

Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT

710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)

710/107 .Bus access regulation

710/110 ..Bus master/slave controlling

3 710/111 (2 OR, 1 XR)

Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT

710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)

710/107 .Bus access regulation

710/111 ..Rotational prioritizing (i.e., round robin)

3 710/242 (1 OR, 2 XR)

Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT

710/240 ACCESS ARBITRATING

710/242 .Decentralized arbitrating

2 340/825.5 (0 OR, 2 XR)

Class 340 : COMMUNICATIONS: ELECTRICAL

340/825 SELECTIVE

340/825.5 .Lockout or priority (programmed or variable)

2 340/825.51 (0 OR, 2 XR)

Class 340 : COMMUNICATIONS: ELECTRICAL

340/825 SELECTIVE

340/825.5 .Lockout or priority (programmed or variable)

340/825.51 ..Designated priority

2 370/462 (0 OR, 2 XR)

Class 370 : MULTIPLEX COMMUNICATIONS

370/431 CHANNEL ASSIGNMENT TECHNIQUES

370/462 .Arbitration for access to a channel

2 710/108 (0 OR, 2 XR)

Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT

710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS

10060454 CLSTITLES  
TRANSACTION PROCESSING)

710/107 .Bus access regulation  
710/108 ..Bus locking

2 710/112 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)  
710/107 .Bus access regulation  
710/112 ..Bus request queuing

2 710/116 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)  
710/107 .Bus access regulation  
710/113 ..Centralized bus arbitration  
710/116 ...Dynamic bus prioritization

2 710/117 (2 OR, 0 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)  
710/107 .Bus access regulation  
710/113 ..Centralized bus arbitration  
710/117 ...Time-slotted bus accessing

2 710/119 (0 OR, 2 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS  
TRANSACTION PROCESSING)  
710/107 .Bus access regulation  
710/119 ..Decentralized bus arbitration

2 710/22 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/1 INPUT/OUTPUT DATA PROCESSING  
710/22 .Direct Memory Accessing (DMA)

2 710/309 (1 OR, 1 XR)  
Class 710 : ELECTRICAL COMPUTERS AND DIGITAL DATA  
PROCESSING SYSTEMS: INPUT/OUTPUT  
710/100 INTRASYSTEM CONNECTION (E.G., BUS AND BUS

10060454\_CLSTITLES

TRANSACTION PROCESSING)

710/305 .Bus interface architecture  
 710/306 ..Bus bridge  
 710/309 ...Arbitration

2 711/158 (1 OR, 1 XR)

Class 711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
 SYSTEMS: MEMORY

711/100 STORAGE ACCESSING AND CONTROL  
 711/154 .Control technique  
 711/158 ..Prioritizing

2 711/168 (0 OR, 2 XR)

Class 711 : ELECTRICAL COMPUTERS AND DIGITAL PROCESSING  
 SYSTEMS: MEMORY

711/100 STORAGE ACCESSING AND CONTROL  
 711/167 .Access timing  
 711/168 ..Concurrent accessing

10060454\_QUAL

6141713	72
5987549	72
4423384	72
4897833	72
5261109	72
5274822	72
5649206	72
5948078	72
6026464	72
6301642	72
5887267	67
4814974	65
4969120	65
5307466	65
4494192	65
4924380	65
5371893	65
5426737	65
5699540	65
5842025	65
5857114	65
5884051	65
6105094	65
4789926	65
5513096	64
5812880	64
6131114	64
5918025	63
4541043	63
4586128	63
5682467	63
4096572	63
4363094	63
4536839	63
4611297	63
4760521	63
4768145	63
5317696	63
5432911	63
5506970	63
5996037	63
6070205	63
6240475	63
6317813	63
6697904	63
4928234	58
5392434	58
5768543	58

10060454\_QUAL

5598554 58

5815681 58